



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

NOTICE OF ACCEPTANCE (NOA)

Protech Screens, Inc.
P. O. Box 1710
Pearland, TX 77588

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER- Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: 0.028" Stainless Steel Hurricane Screen Barrier

APPROVAL DOCUMENT: Drawing No. 12-097, titled "Hurricane Screen Barrier", sheets 1 through 10 of 10, prepared by EngCo, Inc., dated May 17, 2012, signed and sealed by Pedro De Figueiredo, P.E. on March 12, 2013, bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each module shall bear a permanent label with the manufacturer's name or logo, city, state and the following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises & renews NOA #07-0208.08 and consists of this page 1, evidence submitted pages E-1, E-2, E-3 & E-4 as well as approval document mentioned above.

The submitted documentation was reviewed by Helmy A. Makar, P.E., M.S.



Helmy A. Makar
04/18/2013

NOA No 12-0725.02
Expiration Date: 08/22/ 2017
Approval Date: 04/18/ 2013
Page 1

Protech Screens, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 02-0212.06

A. DRAWINGS

1. *Manufacturer's die drawings and sections.*
2. *Drawing No. 02-623, titled "Hurricane Screen Shutter", sheets 1 through 3, prepared by EngCo, Inc., dated 5/22/02, signed and sealed by Pedro De Figueiredo, P.E.*

B. TESTS

1. *Test reports on 1) Uniform Static Air Pressure Test, Loading per SFBC PA 202-94
2) Cyclic Wind Pressure Loading per SFBC, PA 203-94
3) Large Missile Impact Test per SFBC, PA 201-94
along with marked-up drawings and installation diagram of an aluminum hurricane screen shutter with a stainless steel screen, prepared by Hurricane Testing Laboratories, Test Report No. 0203-1221-01, dated 12/17/01, signed and sealed by Vinu Abraham, P.E.*

C. CALCULATIONS

1. *Anchor Calculations and structural analysis, prepared by EngCo, Inc., dated 5/28/02, signed and sealed by Pedro De Figueiredo, P.E.*

D. MATERIAL CERTIFICATIONS

1. *None*

E. STATEMENTS

1. *Statement letter of conformance and no financial interest, dated 5/31/02, signed and sealed by Pedro De Figueiredo, P.E.*

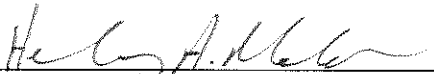
F. OTHER

1. *Letter from Pistorino & Alam Consulting Engineers, Inc.*

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 03-0528.01

A. DRAWINGS

1. *Manufacturer's die drawings and sections.*
2. *Drawing No. 02-623R1, titled "Hurricane Screen Shutter", sheets 1 through 5 of 5, prepared by EngCo, Inc., revision #1, dated April 25, 2003, signed and sealed by Pedro De Figueiredo, P.E.,*


Helmy A. Makar, P.E., M.S.

Product Control Unit Supervisor

NOA No 12-0725.02

Expiration Date: 08/22/ 2017

Approval Date: 04/18/ 2013

Protech Screens, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

B. TESTS

1. *Test reports on Uniform Static Air Pressure Test per TAS 202, Cyclic Wind Pressure per TAS 203, and Large Missile Impact Test per TAS 201 along with marked-up drawings and installation diagram of Series "F" Frame Operable Impact Screen, prepared by Construction Consulting Laboratory, International, Test Report No. CCLI-02-150, dated May 19, 2003, signed and sealed by Abdol H. Rezadad, P.E.*
2. *Test reports on Uniform Static Air Pressure Test per TAS 202, Cyclic Wind Pressure per TAS 203, and Large Missile Impact Test per TAS 201 along with marked-up drawings and installation diagram of Series "L" Frame Triple Mulled Impact Screen, prepared by Construction Consulting Laboratory, International, Test Report No. CCLI-03-028, dated May 6, 2003, signed and sealed by Abdol H. Rezadad, P.E.*

C. CALCULATIONS

1. *Anchor Calculations and structural analysis, 20 pages, prepared by EngCo, Inc., dated May 13, 2003, signed and sealed by Pedro De Figueiredo, P.E.*
2. *Anchor Calculations and structural analysis, 6 pages, prepared by EngCo, Inc., dated June 3, 2002, signed and sealed by Pedro De Figueiredo, P.E.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *None*

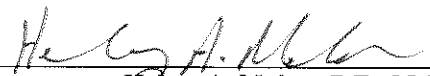
3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #05-0228.04

A. DRAWINGS

1. *Drawing No. 05-016, titled " Hurricane Screen Barrier ", sheets 1 through 7 of 7, prepared by EngCo, Inc., dated January 14, 2005, signed and sealed by Pedro De Figueiredo, P.E. on April 11, 2005.*

B. TESTS

1. *Test reports on Uniform Static Air Pressure Test per TAS 202, Cyclic Wind Pressure per TAS 203, and Large Missile Impact Test per TAS 201 along with marked-up drawings and installation diagram of Series "F" Frame Operable Impact Screen, prepared by Construction Consulting Laboratory, International, Test Report No. CCLI-04-040, dated April 12, 2004, signed and sealed by Abdol H. Rezadad, P.E.*



Helmy A. Makar, P.E., M.S.
Product Control Unit Supervisor
NOA No 12-0725.02
Expiration Date: 08/22/ 2017
Approval Date: 04/18/ 2013

Protech Screens, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. *Test reports on Uniform Static Air Pressure Test per TAS 202, Cyclic Wind Pressure per TAS 203, and Large Missile Impact Test per TAS 201 along with marked-up drawings and installation diagram of Series "Z" Impact Screen, prepared by Construction Consulting Laboratory, International, Test Report No. CCLI-04-145, dated September 10, 2004, signed and sealed by Abdol H. Rezadad, P.E.*
3. *Test reports on Uniform Static Air Pressure Test per TAS 202, and Cyclic Wind Pressure per TAS 203, along with marked-up drawings and installation diagram of Series "Z" Impact Screen, prepared by Construction Consulting Laboratory, International, Test Report No. CCLI-04-162, dated September 23, 2004, signed and sealed by Abdol H. Rezadad, P.E.*

C. CALCULATIONS

1. *Anchor Calculations and structural analysis, 20 pages, prepared by EngCo, Inc., dated February 24, 2005, signed and sealed by Pedro De Figueiredo, P.E.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *None*

4. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 05-0912.02

A. DRAWINGS

1. *Drawing No. 05-016r1, titled "Hurricane Screen Barrier", sheets 1 through 7 of 7, prepared by EngCo, Inc., dated July 11, 2005, signed and sealed by Pedro De Figueiredo, P.E. on July 11, 2005.*

B. TESTS

1. *None.*

C. CALCULATIONS

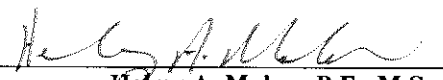
1. *None.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *None.*



Helmy A. Makar, P.E., M.S.
Product Control Unit Supervisor
NOA No 12-0725.02

Expiration Date: 08/22/ 2017

Approval Date: 04/18/ 2013

Protech Screens, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

5. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #07-0208.08

A. DRAWINGS

1. *None.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *None*

6. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *None.*

B. TESTS

1. *None.*

C. CALCULATIONS

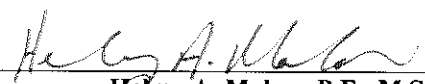
1. *None.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Department of Regulatory and Economic Resources.*

E. MATERIAL CERTIFICATIONS

1. *None*



Helmy A. Makar, P.E., M.S.
Product Control Unit Supervisor

NOA No 12-0725.02

Expiration Date: 08/22/ 2017

Approval Date: 04/18/ 2013

SCREEN BARRIER

0.028" STAINLESS STEEL HURRICANE BARRIER
LARGE AND SMALL IMPACT RESISTANT
ALLOWABLE PRESSURE: SEE SHEET 2

GENERAL NOTES:

- 1- CODE: FLORIDA BUILDING CODE 2010 - HVHZ.
- 2- TEST COMPLIANCE: TAS 201, TAS 202 AND TAS 203
- 3- PRODUCT DESCRIPTION: THIS PRODUCT IS A HURRICANE BARRIER DEVICE COMPOSED OF AN OPERABLE OR FIXED SCREEN
- 4- LABEL: A PERMANENT LEGIBLE LABEL SHALL BE PLACED ON EACH UNIT AT A VISIBLE LOCATION STATING THE FOLLOWING:
- "HURRICANE SCREEN BARRIER
PROTECH SCREEN, INC. - PEARLAND, TEXAS
MIAMI-DADE COUNTY PRODUCT CONTROL APPROVED"
- 5- MATERIAL:
- 5.1- SCREEN MESH MADE OF 0.028" STAINLESS STEEL 304 GRADE.
- 5.2- ALL ALUMINUM EXTRUSIONS SHALL BE MADE WITH 6063-T5 ALLOY OR AS INDICATED IN THIS DRAWING.
- 5.3- FASTENERS: ASSEMBLY SCREWS AND ANCHORS SHALL BE AS SPECIFIED BY THE CURRENT SET OF DRAWINGS. INSTALLATION AND LOADS AS PER THIS APPROVAL. ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING.
- 6- LOADS: A PROJECT DESIGN PRESSURES, DETERMINED FROM SECTION 1620 AND ASCE 7-10, SHALL BE PROVIDED BY A PROFESSIONAL ARCHITECT OR ENGINEER. THE PRESSURES MUST BE MULTIPLIED BY 0.6 FACTOR AND MUST NOT EXCEED THE PRODUCT ALLOWABLE PRESSURES HERE IN SPECIFIED.
- 7- THE CONTRACTOR MUST VERIFY THE ADEQUACY OF THE EXISTING STRUCTURE IN SUSTAINING THE PRODUCT IMPOSED LOADS.
- 8- MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL/ METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF 2010 FBC SECTION 2003.8.4.
- 9- 33 1/3% INCREASE IN ALLOWABLE STRESS HAS NOT BEEN USED IN THE DESIGN OF THIS PRODUCT. ANCHORS INTO WOOD WERE DESIGNED WITH 1.6 LOAD DURATION.

TABLE OF CONTENTS:

SHEET	CONTENTS
1	GENERAL NOTES AND TABLE OF CONTENTS
2	TYPICAL ELEVATIONS AND ALLOWABLE PRESSURES
3	TYPE A BARRIER DETAILS
4	TYPE B BARRIER DETAILS
5	TYPE C BARRIER DETAILS
6	TYPE D60 BARRIER DETAILS
7	TYPE D48 BARRIER DETAILS
8	TYPE E BARRIER DETAILS
9	TYPE F BARRIER DETAILS
10	PRODUCT COMPONENTS & CORNER ASSEMBLY

MANUFACTURER:

PROTECH
SCREENS, INC

2425 ROY ROAD
PEARLAND - TEXAS
PHONE: (281) 485-2300
FAX: (281) 485-8837

PRODUCT:

SCREEN BARRIER
0.028" STAINLESS STEEL
HURRICANE SCREEN
LARGE & SMALL MISSILE
IMPACT RATED

ENGINEERING:

ENGCO INC. CA 8116

5595 ORANGE DR. 201
DAVIE, FL. 33314
Tel.: (954) 585-0304
ENGCO@AOL.COM



Engineer Seal
Pedro De Figueiredo - PE 52609

MIAMI-DADE BCCO:

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 12-0725-02
Expiration Date 08/22/2017
By: [Signature]
Miami Dade Product Control

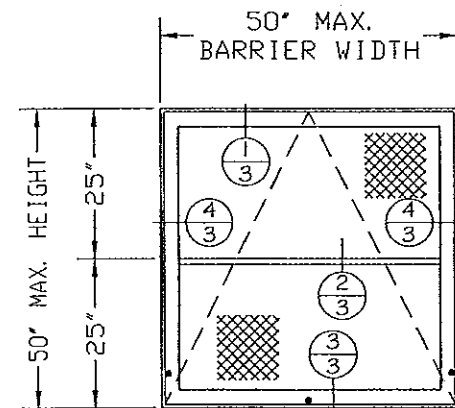
DATE: 05/17/2012
SCALE: NA
DESIGN BY: PPMF

SHEET
1 OF 10

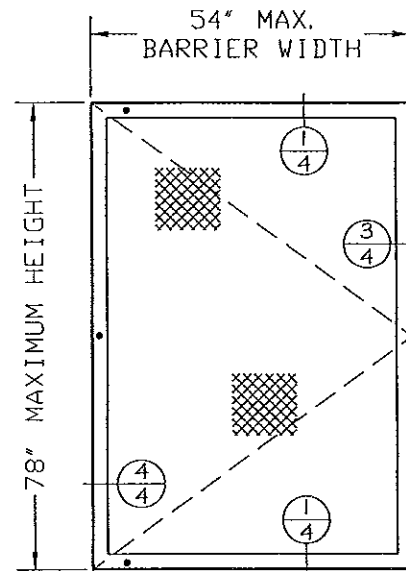
DRAWING #:
12-097

TYPICAL ELEVATIONS AND ALLOWABLE PRESSURES

TYPE A
OUT-SWING OPERABLE BARRIER
(SHEET 3 OF 10)



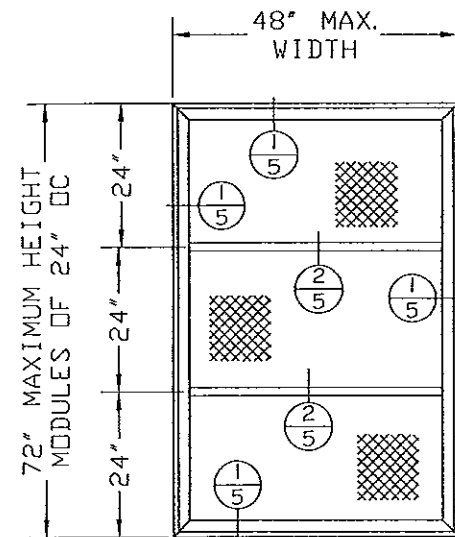
TYPE B - OUT-SWING OPERABLE BARRIER
(SHEET 4 OF 10)



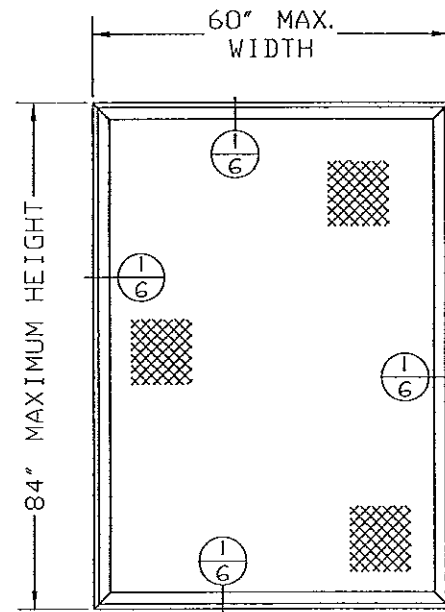
NOTES:

- 1- PRODUCT CAN BE INSTALLED ROTATED.
- 2- #12X.028 - 40% POROSITY (SCREEN)

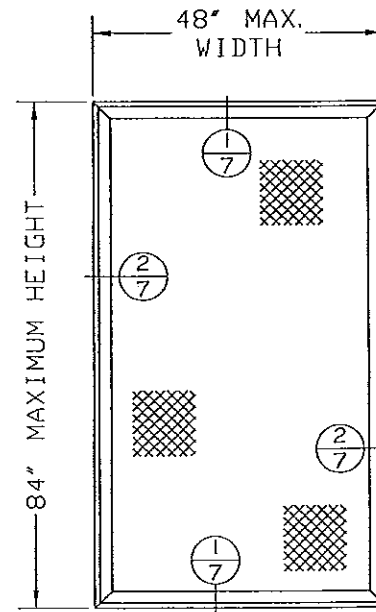
TYPE C - FIXED BARRIER
(SHEET 5 OF 10)



TYPE D60 FIXED BARRIER
(SHEET 6 OF 10)



TYPE D48 FIXED BARRIER
(SHEET 7 OF 10)

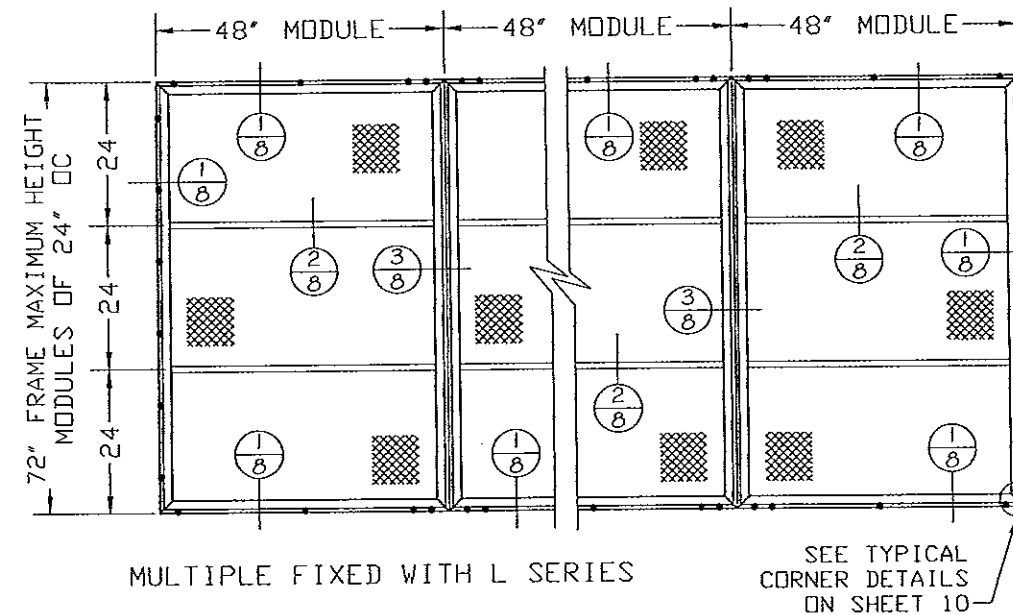


ALLOWABLE DESIGNED PRESSURES:

TYPE	SERIES	ALLOWABLE PRESSURES (PSF)
A	F	+88, -88
B	F	+98, -98
C	Z	+52, -52
	L	+55, -60
	F	+53, -58
D60	Z	+122, -217
D48	Z	+121, -135
E (*)	L	+55, -60
F (*)	L & Z	+55, -60

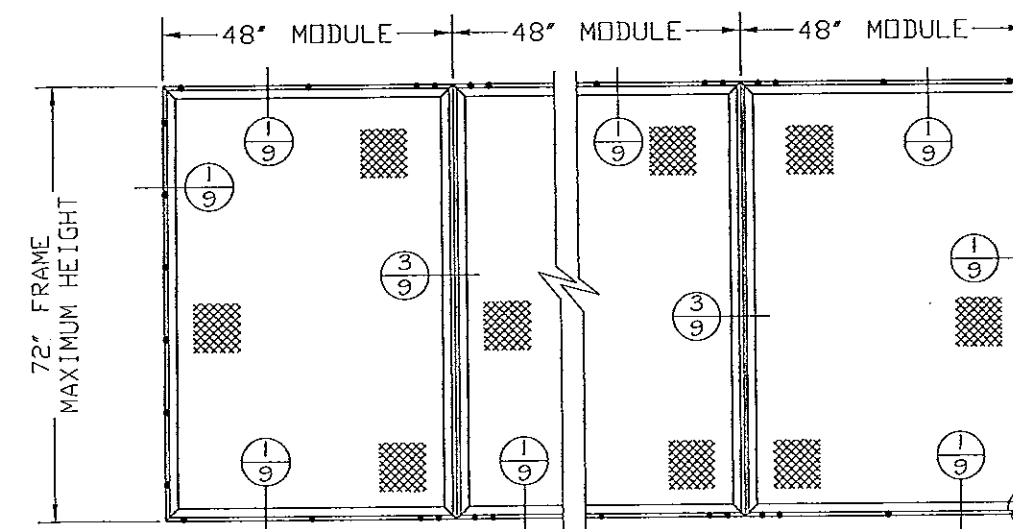
(*) MULTIPLE FIXED BARRIERS

TYPE E - MULTIPLE FIXED BARRIERS
(SHEET 8 OF 10)



MULTIPLE FIXED WITH L SERIES

TYPE F - MULTIPLE FIXED BARRIERS
(SHEET 9 OF 9)



MULTIPLE FIXED WITH L & Z SERIES

MANUFACTURER:

**PROTECH
SCREENS, INC**

2425 ROY ROAD
PEARLAND - TEXAS
PHONE: (281) 485-2300
FAX: (281) 485-8837

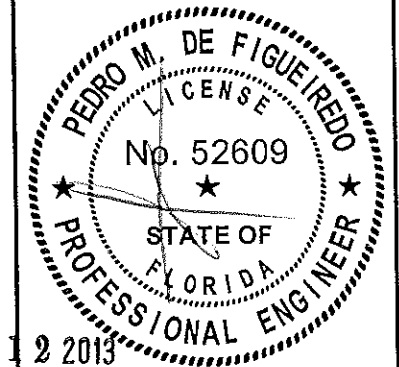
PRODUCT:

SCREEN BARRIER
0.028" STAINLESS STEEL
HURRICANE SCREEN
LARGE & SMALL MISSILE
IMPACT RATED

ENGINEERING:

ENGCO INC. CA 8116

5595 ORANGE DR. 201
DAVIE, FL. 33314
Tel.: (954) 585-0304
ENGCO@AOL.COM



MAR 12 2013

Engineer Seal
Pedro De Figueiredo - PE 52609

MIAMI-DADE BCCO:

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 12-0725.02
Expiration Date 08/22/2017
By *[Signature]*
Miami Dade Product Control

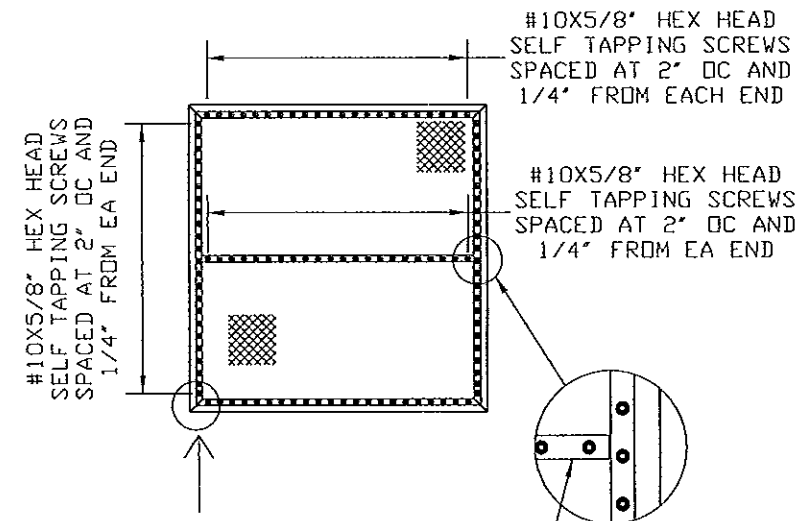
DATE: 05/17/2012
SCALE: NA
DESIGN BY: PPMF

SHEET
2 OF 10

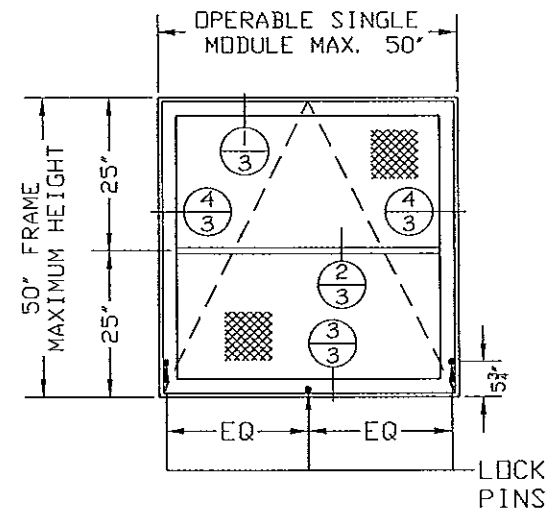
DRAWING #:
12-097

TYPE A BARRIER - Pd= ±88 PSF
OUT-SWING OPERABLE SINGLE MODULES
APPLICABLE ONLY FOR "F" SERIES

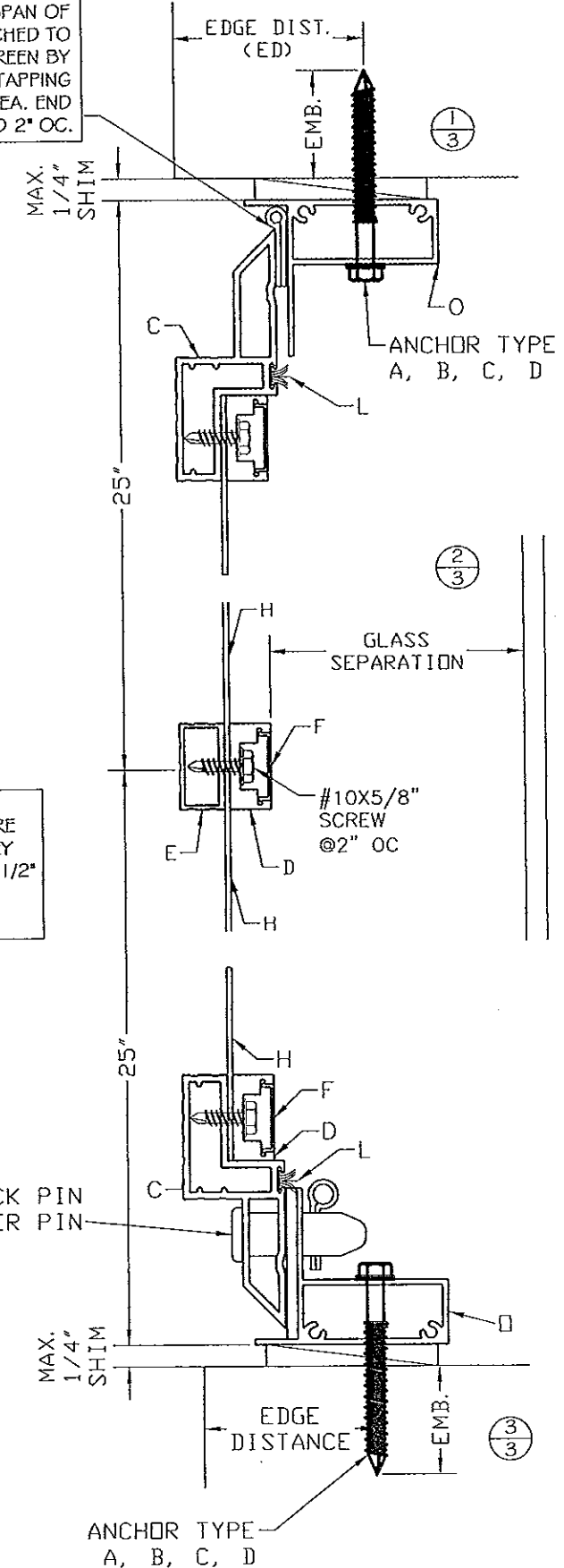
REAR BARRIER ELEVATION
TYPICAL SCREEN PANEL
ASSEMBLY SCREWS LAY-OUT



FRONT BARRIER ELEVATION
TYPICAL SCREEN PANEL
LOCKING PINS AND HINGE LAY-OUT



2X.06X.125 DIAM PIN WITH 1/2" ALUM. PLANO HINGE LOCATED FULL SPAN OF FRAME HEAD ATTACHED TO FRAME AND OPERABLE SCREEN BY #8X1/2" PAN HEAD SELF TAPPING SCREWS SPACED 1/4" FROM EA. END AND 2" OC.

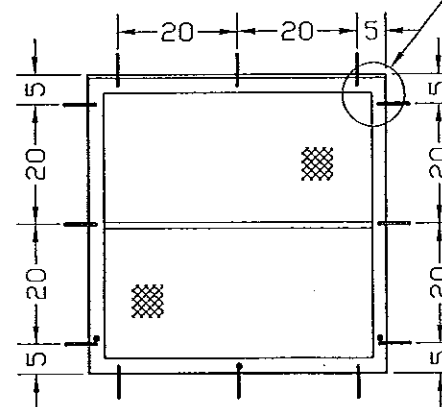


(2) #8X1 PHSEF TAPPING SCREWS

ANCHOR TYPE A, B, C, D

.0625"-1x7 ALUMINUM REINF. PLATE AT EACH LOCK PIN LOCATION. PLATE IS ADHEARED TO SUBFRAME WITH LIQUID ALUMINUM WELD BY DEVCON.

ANCHOR LAY-OUT



TYPICAL SCREEN CORNER CONSTRUCTION: CORNERS ARE MITERS W/ STEEL CORNER KEY (G) ATTACHED WITH TWO #8X 1/2" PAN HEAD SELF TAPPING SCREWS PER CORNER

1/2" SS LOCK PIN W/ SS COTTER PIN

GLASS SEPARATION:

(SINGLE UNIT - TYPE A)	
"F" SERIES OPERABLE	
ELEVATION <= 30'	5 1/4"
ELEVATION > 30'	2 3/4"

ANCHORS SCHEDULE

TYPE	DESCRIPTION	SUBSTRATE	EMBED.	ED
A	1/4" TAPCON BY BUILDEX	3000 PSI CONCRETE	1.750	2.50
B	1/4" TAPCON BY BUILDEX	HOLLOW BLOCK	1.250	2.50
C	1/4" LAG SCREWS	WOOD SG>0.55	1.500	0.75
D	1/4"-14X1 1/2" SDS GR5	1/8" METAL	.125	0.75

NOTES:
1- EMBEDMENT AND EDGE DISTANCE ARE BEYOND WALL DRESSING.
2- 1/8" METAL 6063-T5 ALUMINUM OR ASTM A36 STEEL

MANUFACTURER:

**PROTECH
SCREENS, INC**

2425 ROY ROAD
PEARLAND - TEXAS
PHONE: (281) 485-2300
FAX: (281) 485-8837

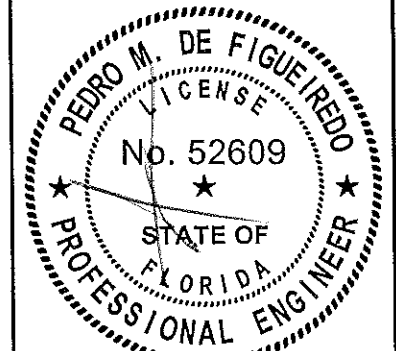
PRODUCT:

SCREEN BARRIER
0.028" STAINLESS STEEL
HURRICANE SCREEN
LARGE & SMALL MISSILE
IMPACT RATED

ENGINEERING:

ENGCO INC. CA 8116

5595 ORANGE DR. 201
DAVIE, FL. 33314
Tel.: (954) 585-0304
ENGCO@AOL.COM



MAR 12 2013

Engineer Seal
Pedro De Figueiredo - PE 52609

MIAMI-DADE BCCO:

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0725.02
Expiration Date 08/22/2017
By *[Signature]*
Miami Dade Product Control

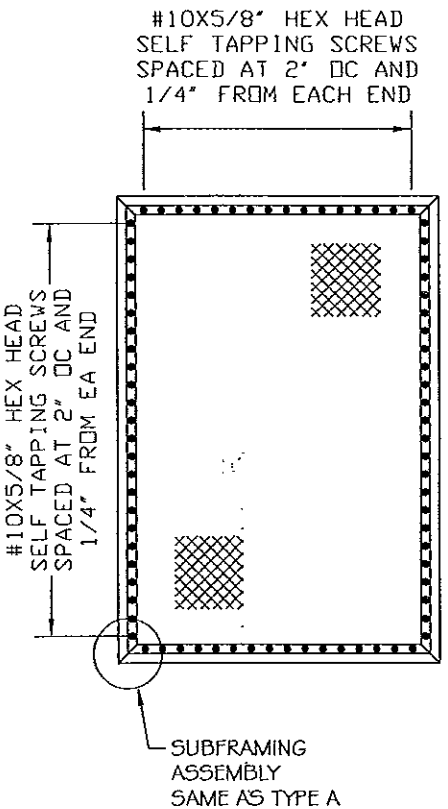
DATE: 05/17/2012
SCALE: NA
DESIGN BY: PPMF

SHEET
3 OF 10

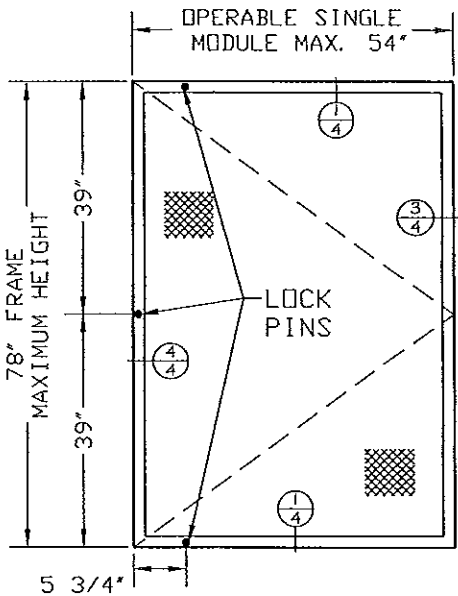
DRAWING #:
12-097

TYPE B - Pd= ±98 PSF
ALTERNATE OUT-SWING OPERABLE SINGLE MODULES
APPLICABLE ONLY FOR "F" SERIES

REAR BARRIER ELEVATION
TYPICAL SCREEN PANEL
ASSEMBLY SCREWS LAY-OUT

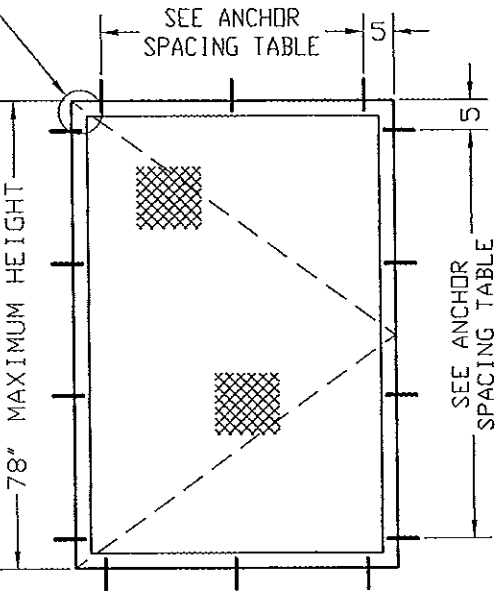


FRONT BARRIER ELEVATION
TYPICAL SCREEN PANEL
LOCKING PINS AND HINGE LAY-OUT



TYPICAL SCREEN CORNER
CONSTRUCTION: CORNERS ARE
MITTERS W/ STEEL CORNER KEY (G)
ATTACHED WITH TWO #8x 1/2" PAN
HEAD SELF TAPPING SCREWS PER
CORNER

ANCHOR LAY-OUT

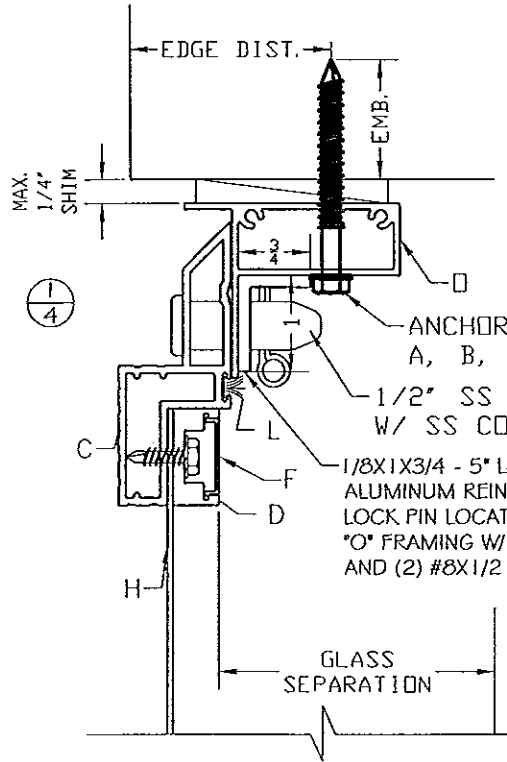


ANCHOR SPACING (in oc)		
TYPE	HEADER/SILL	JAMBS
A	22"	22"
B	14 5/8"	11"
C	14 5/8"	11"
D	22"	22"

ANCHORS SCHEDULE

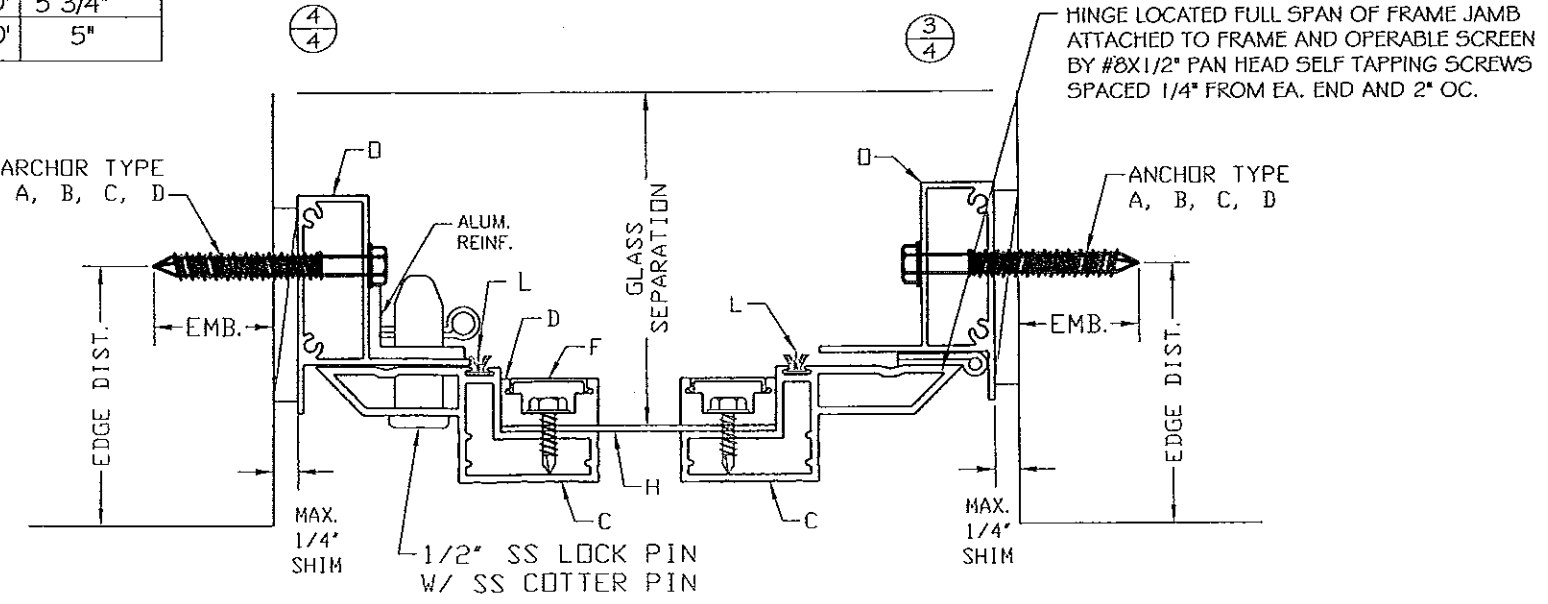
TYPE	DESCRIPTION	SUBSTRATE	EMBED.	ED
A	1/4" TAPCON BY BUILDEX	3000 PSI CONCRETE	1.750	2.50
B	1/4" TAPCON BY BUILDEX	HOLLOW BLOCK	1.250	2.50
C	1/4" LAG SCREWS	WOOD SG>0.55	1.500	0.75
D	1/4-14X1 1/2" SDS GR5	1/8" METAL	.125	0.75

NOTES:
1- EMBEDMENT AND EDGE DISTANCE ARE BEYOND WALL DRESSING.
2- 1/8" METAL 6063-T5 ALUMINUM OR ASTM A36 STEEL



GLASS SEPARATION:
(SINGLE UNIT - TYPE B)
"F" SERIES OPERABLE

ELEVATION <= 30'	5 3/4"
ELEVATION > 30'	5"



MANUFACTURER:
**PROTECH
SCREENS, INC**

2425 ROY ROAD
PEARLAND - TEXAS
PHONE: (281) 485-2300
FAX: (281) 485-8837

PRODUCT:
SCREEN BARRIER
0.028" STAINLESS STEEL
HURRICANE SCREEN
LARGE & SMALL MISSILE
IMPACT RATED

ENGINEERING:
ENGCO INC. CA 8116
5595 ORANGE DR. 201
DAVIE, FL. 33314
Tel.: (954) 585-0304
ENGCO@AOL.COM



MAR 12 2013
Engineer Seal
Pedro De Figueiredo - PE 52609

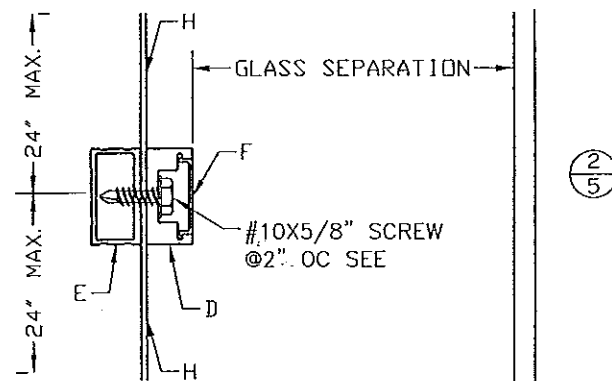
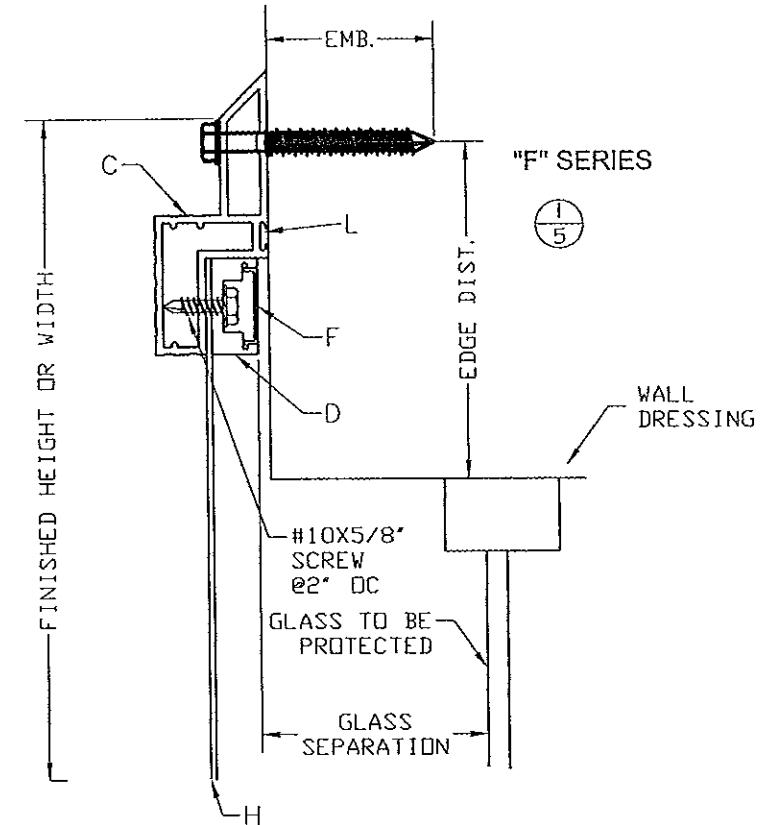
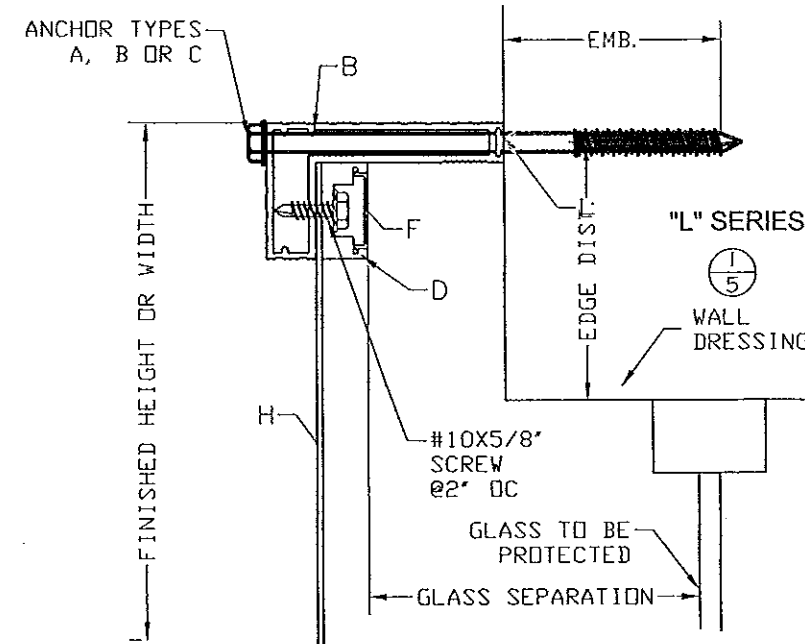
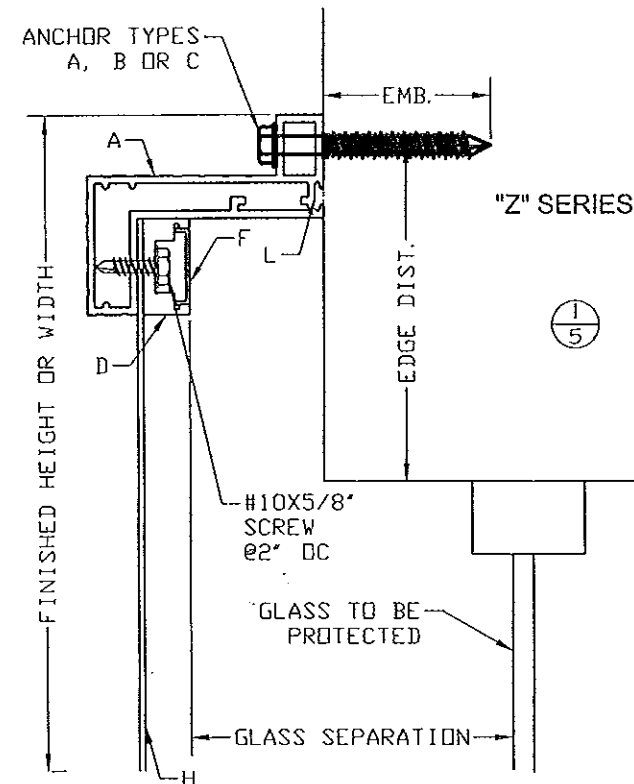
MIAMI-DADE BCCO:

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0725.02
Expiration Date 08/22/2017
By *[Signature]*
Miami Dade Product Control

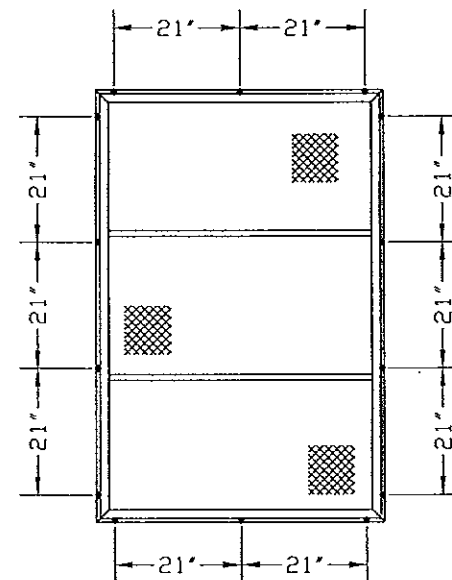
DATE: 05/17/2012
SCALE: NA
DESIGN BY: PPMF

SHEET
4 OF 10
DRAWING #:
12-097

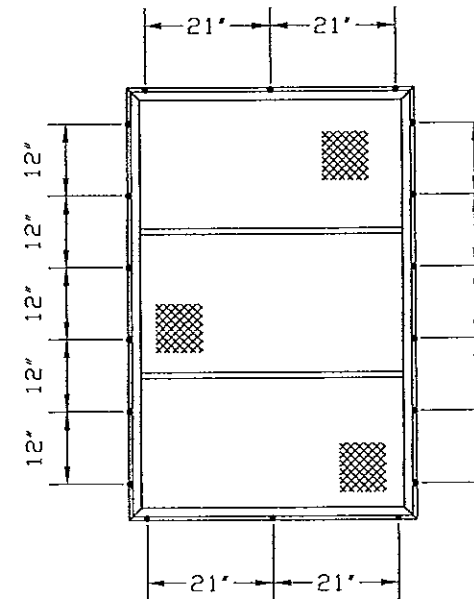
TYPE C BARRIER
Pd (F)= +53,-58 PSF, Pd (L)= +55,-60 PSF, Pd (Z)= +52,-52 PSF
FIXED SINGLE MODULES
APPLICABLE FOR "F", "L", "Z" SERIES



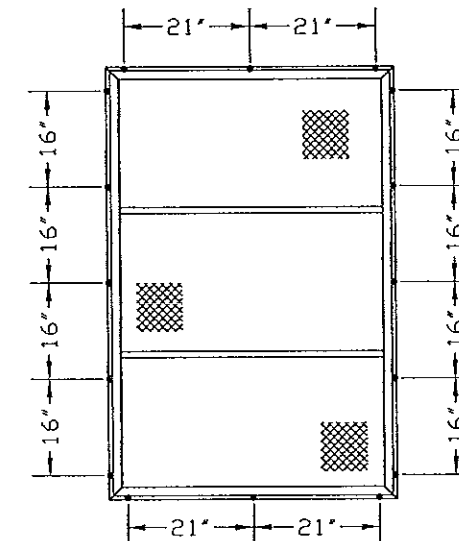
ANCHORS SPACING LAY-OUT
TRACKS "F" INSTALLATION INTO HOLLOW BLOCK
ALL TRACKS INSTALLATION INTO CONCRETE & WOOD



ANCHORS SPACING LAY-OUT
TRACKS "L" INSTALLATION INTO HOLLOW BLOCK



ANCHORS SPACING LAY-OUT
TRACKS "Z" INSTALLATION INTO HOLLOW BLOCK



GLASS SEPARATION: (SINGLE UNIT)

FRAMING TYPE	ELEVATION	
	<=30'	>30'
Z SERIES	2 3/4"	2 3/8"
L SERIES	3 5/8"	2 1/2"
F SERIES	2 7/8"	2 1/8"

ANCHORS SCHEDULE

TYPE	DESCRIPTION	SUBSTRATE	EMBED.	ED
A	1/4" TAPCON BY BUILDEX	3000 PSI CONCRETE	1.750	2.50
B	1/4" TAPCON BY BUILDEX	HOLLOW BLOCK	1.250	2.50
C	1/4" LAG SCREWS	WOOD SG>0.55	1.500	0.75

NOTES:
1 - EMBEDMENT AND EDGE DISTANCE ARE BEYOND WALL DRESSING.

MANUFACTURER:

**PROTECH
SCREENS, INC**

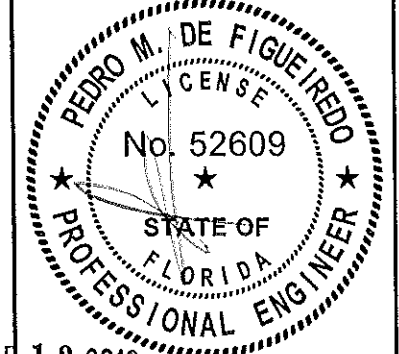
2425 ROY ROAD
PEARLAND - TEXAS
PHONE: (281) 485-2300
FAX: (281) 485-8837

PRODUCT:

SCREEN BARRIER
0.028" STAINLESS STEEL
HURRICANE SCREEN
LARGE & SMALL MISSILE
IMPACT RATED

ENGINEERING:

ENGCO INC. CA 8116
5595 ORANGE DR. 201
DAVIE, FL. 33314
Tel.: (954) 585-0304
ENGCO@AOL.COM



MAR 12 2013
Engineer Seal
Pedro De Figueiredo - PE 52609

MIAMI-DADE BCCO:

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 12-0725.02
Expiration Date 08/22/2017
By: *[Signature]*
Miami Dade Product Control

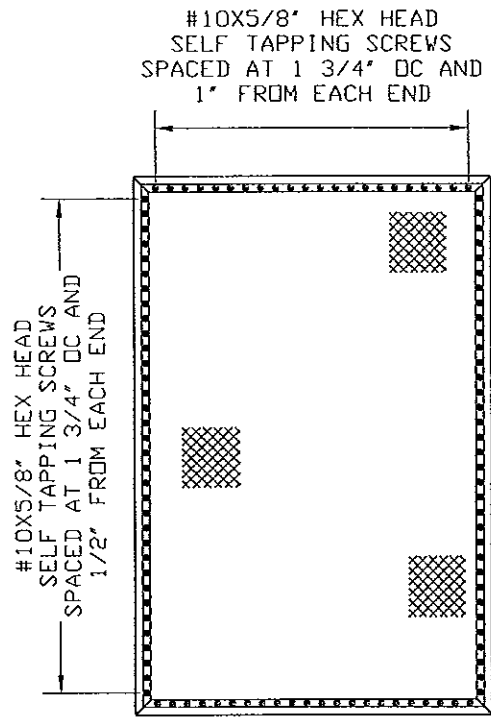
DATE: 05/17/2012
SCALE: NA
DESIGN BY: PPMF

SHEET
5 OF 10

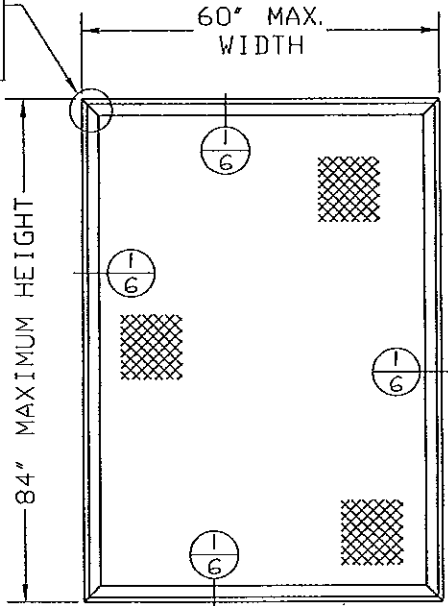
DRAWING #:
12-097

TYPE DGO BARRIER
Pd (F)= +122, -217 PSF
FIXED SINGLE MODULES
APPLICABLE FOR "Z" SERIES

REAR BARRIER ELEVATION
TYPICAL SCREEN PANEL
ASSEMBLY SCREWS LAY-OUT



TYPICAL SCREEN CORNER
CONSTRUCTION: CORNERS ARE
MITTERS W/ STEEL CORNER KEY (G)
ATTACHED WITH TWO #8x 1/2" PAN
HEAD SELF TAPPING SCREWS PER
CORNER



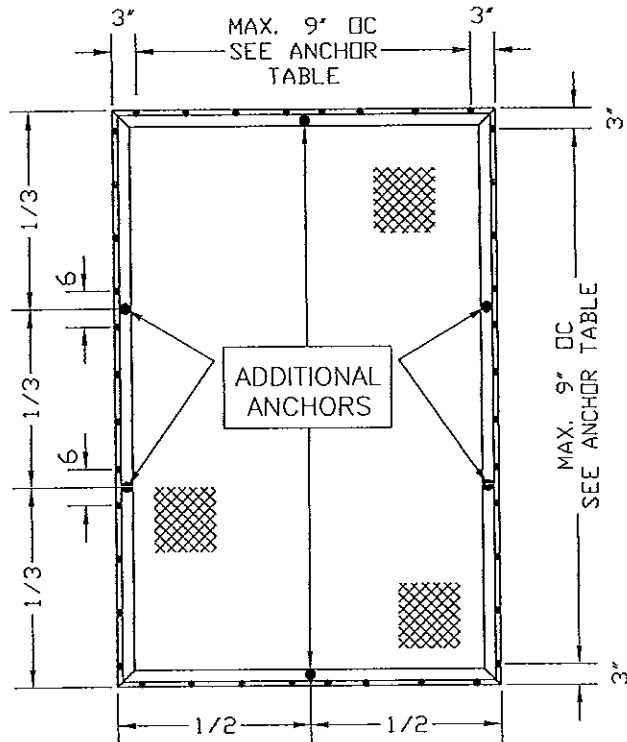
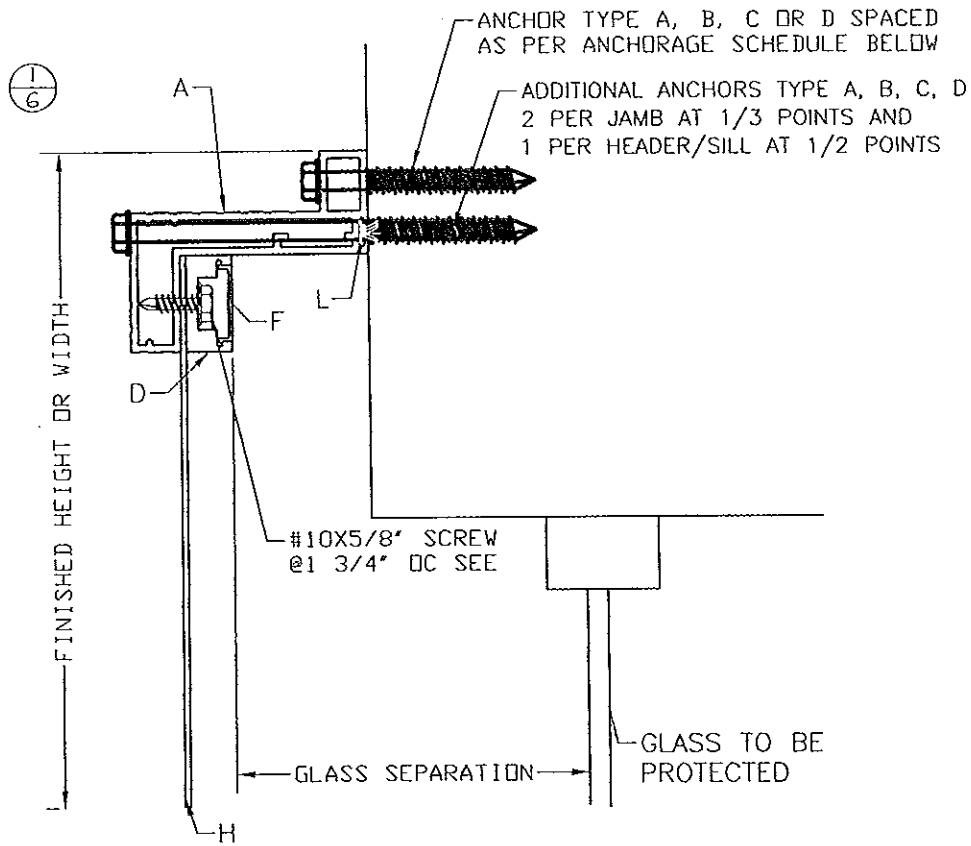
GLASS SEPARATION:

(SINGLE UNIT - TYPE D)		
ELEVATION <= 30'	4	1/4"
ELEVATION > 30'	3	3/4"

ANCHORS SCHEDULE

TYPE	DESCRIPTION	SUBSTRATE	EMBED.	ED
A	1/4" TAPCON BY BUILDEX	3000 PSI CONCRETE	1.750	2.50
B	1/4" TAPCON BY BUILDEX	HOLLOW BLOCK	1.250	2.50
C	1/4" LAG SCREWS	WOOD SG>0.55	1.500	0.75
D	1/4-14x1 1/2" SDS GR5	1/8" METAL	.125	0.75

NOTES:
1- EMBEDMENT AND EDGE DISTANCE ARE BEYOND WALL DRESSING.
2- 1/8" METAL 6063-T5 ALUMINUM OR ASTM A36 STEEL



ANCHOR TABLE
MAXIMUM ANCHOR SPACING INCHES OC.

ANCHOR TYPE	DESIGNED PRESSURE			
	217	163	108	68
A	6	9	9	9
B	3	3	6	9
C	6	9	9	9
D	3	3	6	9

MANUFACTURER:

PROTECH
SCREENS, INC

2425 ROY ROAD
PEARLAND - TEXAS
PHONE: (281) 485-2300
FAX: (281) 485-8837

PRODUCT:

SCREEN BARRIER
0.028" STAINLESS STEEL
HURRICANE SCREEN
LARGE & SMALL MISSILE
IMPACT RATED

ENGINEERING:

ENGCO INC. CA 8116

5595 ORANGE DR. 201
DAVIE, FL. 33314
Tel.: (954) 585-0304
ENGCO@AOL.COM



MAR 12 2013

Engineer Seal
Pedro De Figueiredo - PE 52609

MIAMI-DADE BCCO:

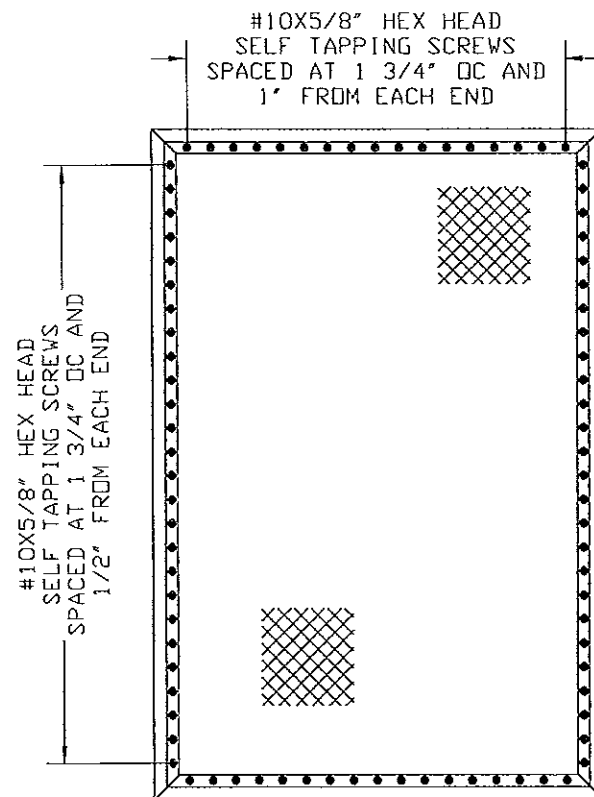
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0725.02
Expiration Date 08/22/2017
By *[Signature]*
Miami Dade Product Control

DATE: 05/17/2012
SCALE: NA
DESIGN BY: PPMF

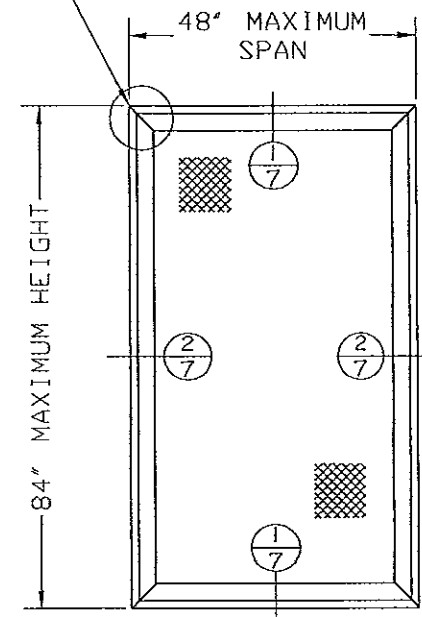
SHEET
6 OF 10

DRAWING #:
12-097

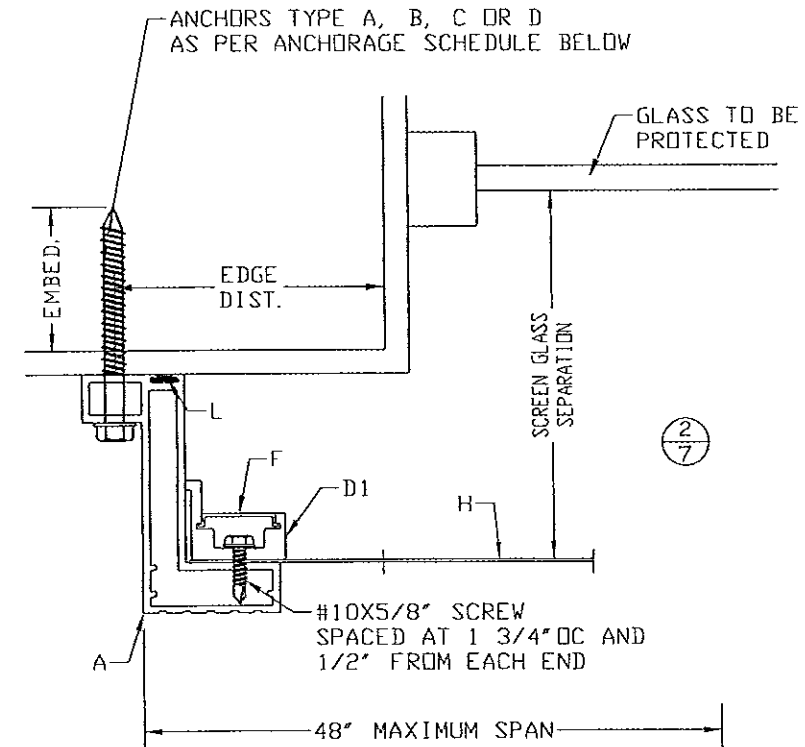
REAR ELEVATION
TYPICAL SCREEN PANEL
ASSEMBLY SCREWS LAY-OUT



TYPICAL SCREEN CORNER
CONSTRUCTION: CORNERS ARE
MITTERED W/ STEEL CORNER KEY
(G) ATTACHED WITH TWO #8X1
1/2" PAN HEAD SELF TAPPING
SCREWS PER CORNER



TYPE D48 BARRIER
Pd= +121, -135 PSF
FIXED SINGLE MODULES
APPLICABLE FOR "Z" SERIES



ANCHOR SPACING (in oc)	
TYPE	JAMBS
A	11"
B	4"
C	12"
D	9"

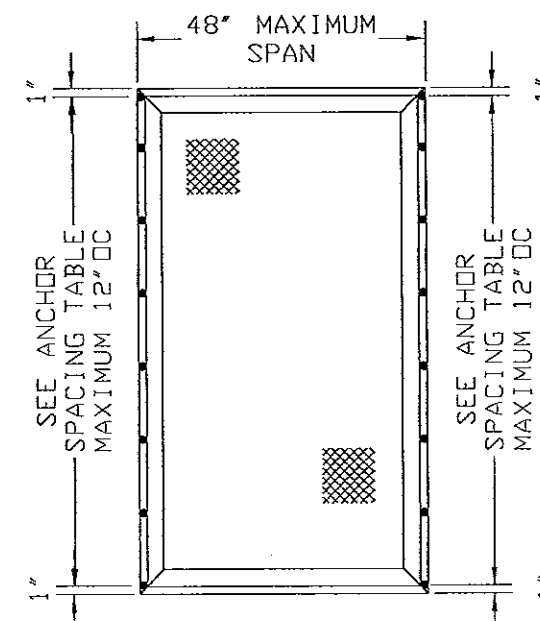
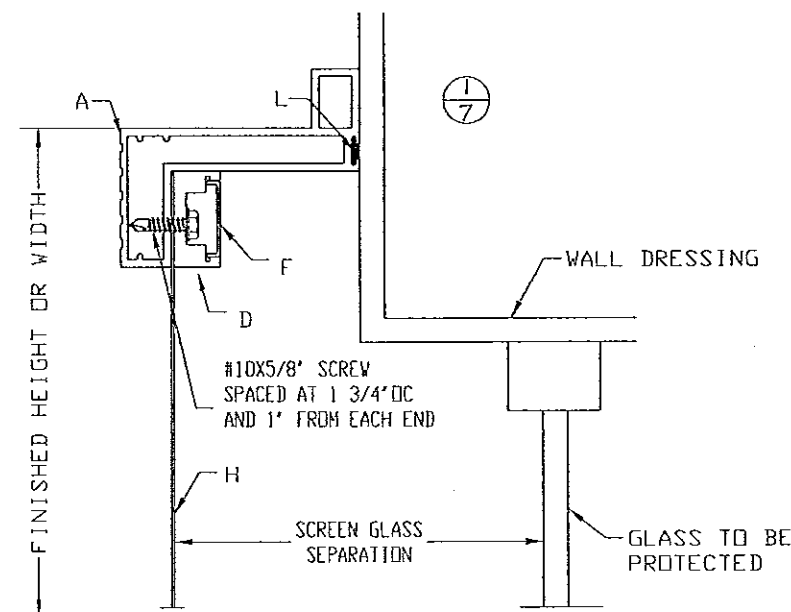
GLASS SEPARATION:

(SINGLE UNIT - TYPE D48)	
ELEVATION >30'	3 3/4"
ELEVATION <=30'	3"

ANCHORS SCHEDULE:

TYPE	DESCRIPTION	SUBSTRATUM	EMBED.	E.D.
A	1/4" TAPCONS BY ITW BUILDEX	3000 PSI CONCRETE	1.75	2.50
B	1/4" TAPCONS BY ITW BUILDEX	HOLLOW BLOCK	1.25	2.50
C	1/4" LAG SCREWS	WOOD SG>0.55	1.50	0.75
D	1/4"-14X1 1/2 SDS GR5	1/8" METAL	1.25	0.75

NOTES:
1- EMBEDMENT AND EDGE DISTANCE ARE BEYOND WALL DRESSING
2- 1/8" METAL 6063-T6 ALUMINUM OR ASTM A36 STEEL



MANUFACTURER:

**PROTECH
SCREENS, INC**

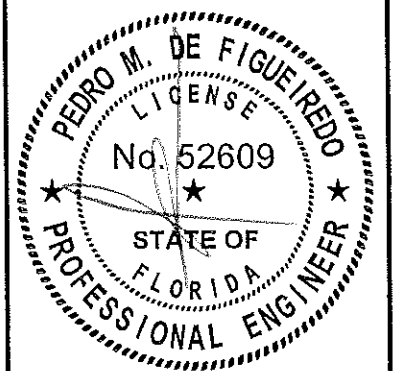
2425 ROY ROAD
PEARLAND - TEXAS
PHONE: (281) 485-2300
FAX: (281) 485-8837

PRODUCT:

SCREEN BARRIER
0.028" STAINLESS STEEL
HURRICANE SCREEN
LARGE & SMALL MISSILE
IMPACT RATED

ENGINEERING:

ENGCO INC. CA 8116
5595 ORANGE DR. 201
DAVIE, FL. 33314
Tel.: (954) 585-0304
ENGCO@AOL.COM



MAR 12 2013 Engineer Seal
Pedro De Figueiredo - PE 52609

MIAMI-DADE BCCO:

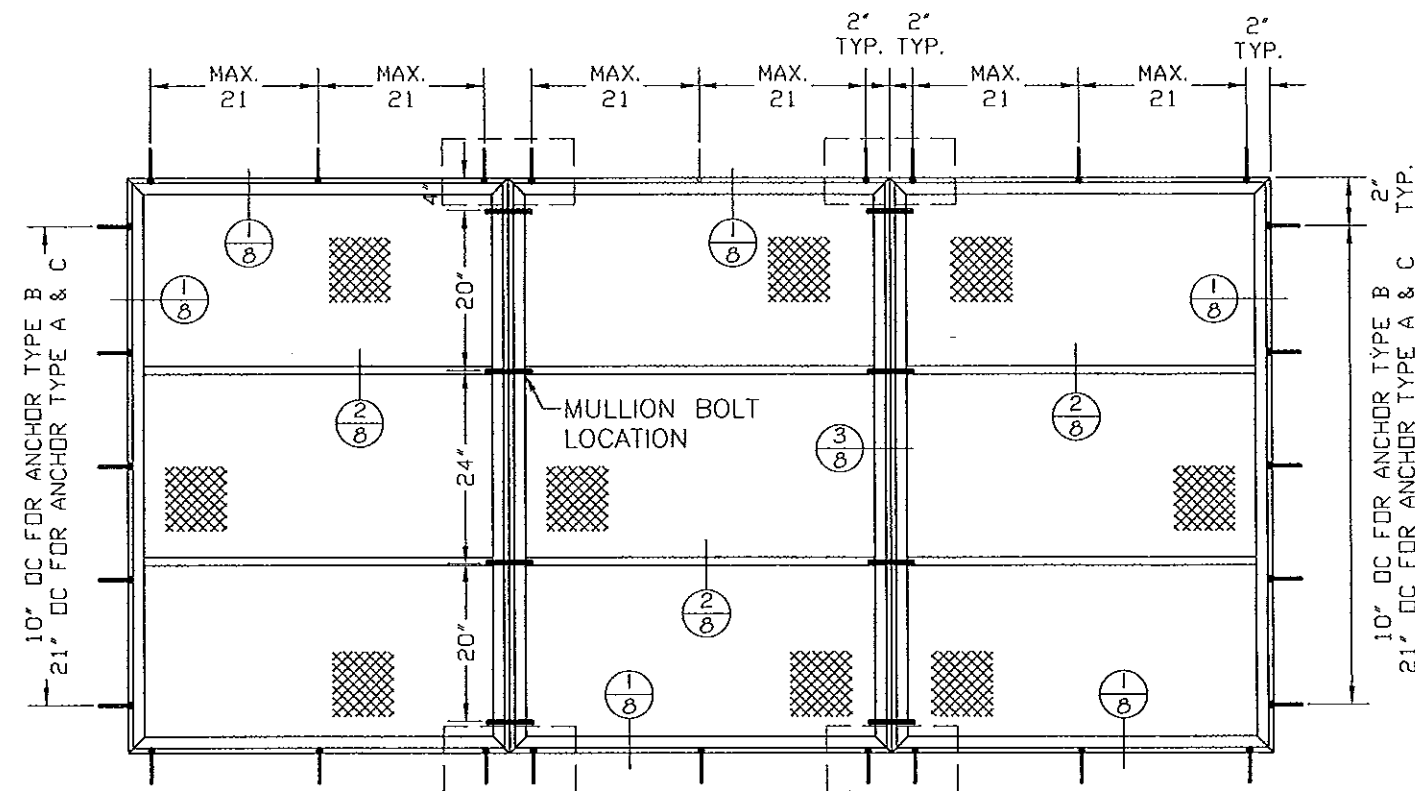
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 12-0735-02
Expiration Date 08/22/2017
By *[Signature]*
Miami Dade Product Control

DATE: 05/17/2012
SCALE: NA
DESIGN BY: PPMF

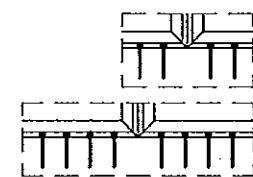
SHEET
7 OF 10

DRAWING #:
12-097

TYPE E BARRIER
Pd= +55, -60 PSF
FIXED MULTIPLE MODULES - APPLICABLE FOR "L" SERIES

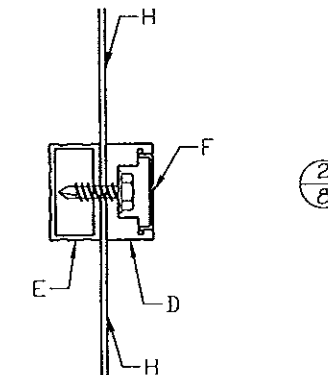
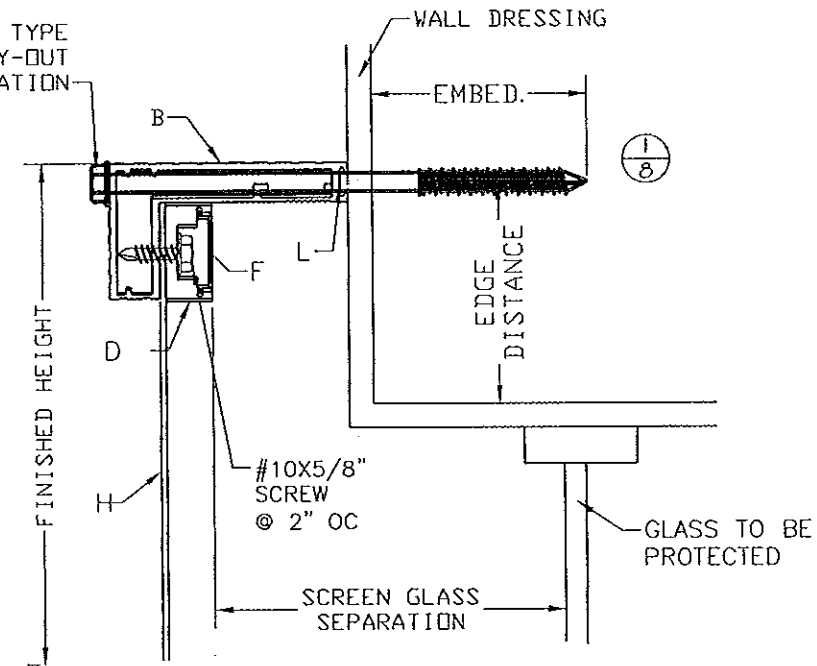


ANCHORS SPACING - "L" TRACK ONLY
INSTALLATION INTO HOLLOW BLOCK, CONCRETE OR WOOD

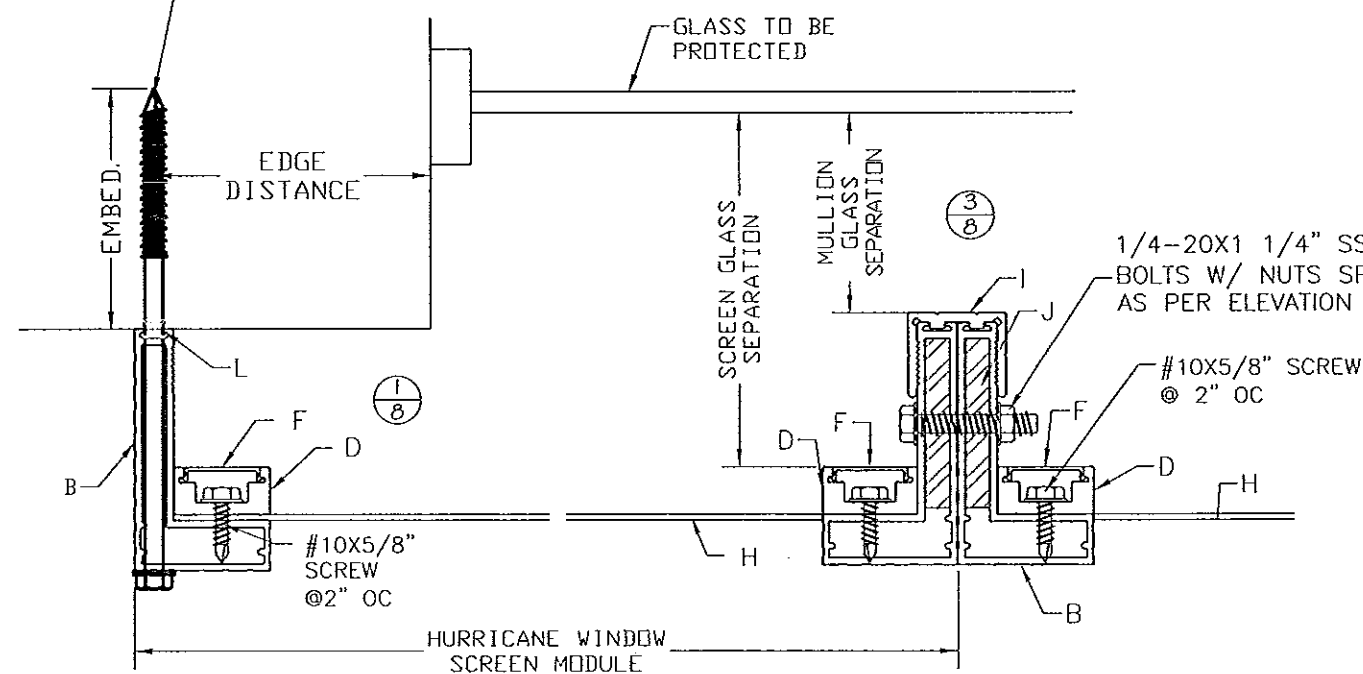


TYPICAL AT EA INTERMEDIATE MULLION
TYPE C ANCHOR - CLUSTER OF 2 ANCHORS
TYPE A ANCHOR - CLUSTER OF 4 ANCHORS
TYPE B ANCHOR - CLUSTER OF 8 ANCHORS
SPACED AT 3" OC

ANCHOR TYPE
A, B, C SEE LAY-OUT
FOR CONFIGURATION



ANCHORS TYPE A, B, C
SEE LAY-OUT CONFIGURATION



1/4-20x1 1/4" SS HWH
BOLTS W/ NUTS SPACED
AS PER ELEVATION

#10x5/8" SCREW
@ 2" OC

GLASS SEPARATION: (MULTIPLE UNITS)

MULLION	ELEVATION <=30'	2"
	ELEVATION >30'	1 3/8"
SCREEN	ELEVATION <=30'	4 1/4"
	ELEVATION >30'	2 5/8"

ANCHORS SCHEDULE

TYPE	DESCRIPTION	SUBSTRATE	EMBED.	ED
A	1/4" TAPCON BY BUILDEX	3000 PSI CONCRETE	1.750	2.50
B	1/4" TAPCON BY BUILDEX	HOLLOW BLOCK	1.250	2.50
C	1/4" LAG SCREWS	WOOD SG>0.55	1.500	0.75

NOTES:

1- EMBEDMENT AND EDGE DISTANCE ARE BEYOND WALL DRESSING.

MANUFACTURER:

**PROTECH
SCREENS, INC**

2425 ROY ROAD
PEARLAND - TEXAS
PHONE: (281) 485-2300
FAX: (281) 485-8837

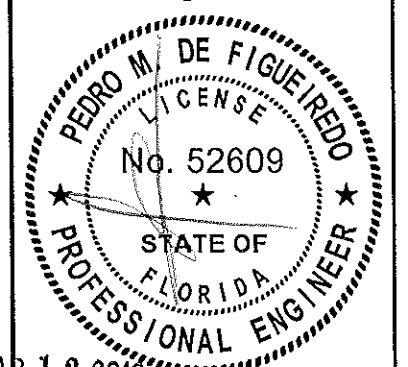
PRODUCT:

SCREEN BARRIER
0.028" STAINLESS STEEL
HURRICANE SCREEN
LARGE & SMALL MISSILE
IMPACT RATED

ENGINEERING:

ENGCO INC. CA 8116

5595 ORANGE DR. 201
DAVIE, FL. 33314
Tel.: (954) 585-0304
ENGCO@AOL.COM



MAR 12 2013

Engineer Seal
Pedro De Figueiredo - PE 52609

MIAMI-DADE BCCO:

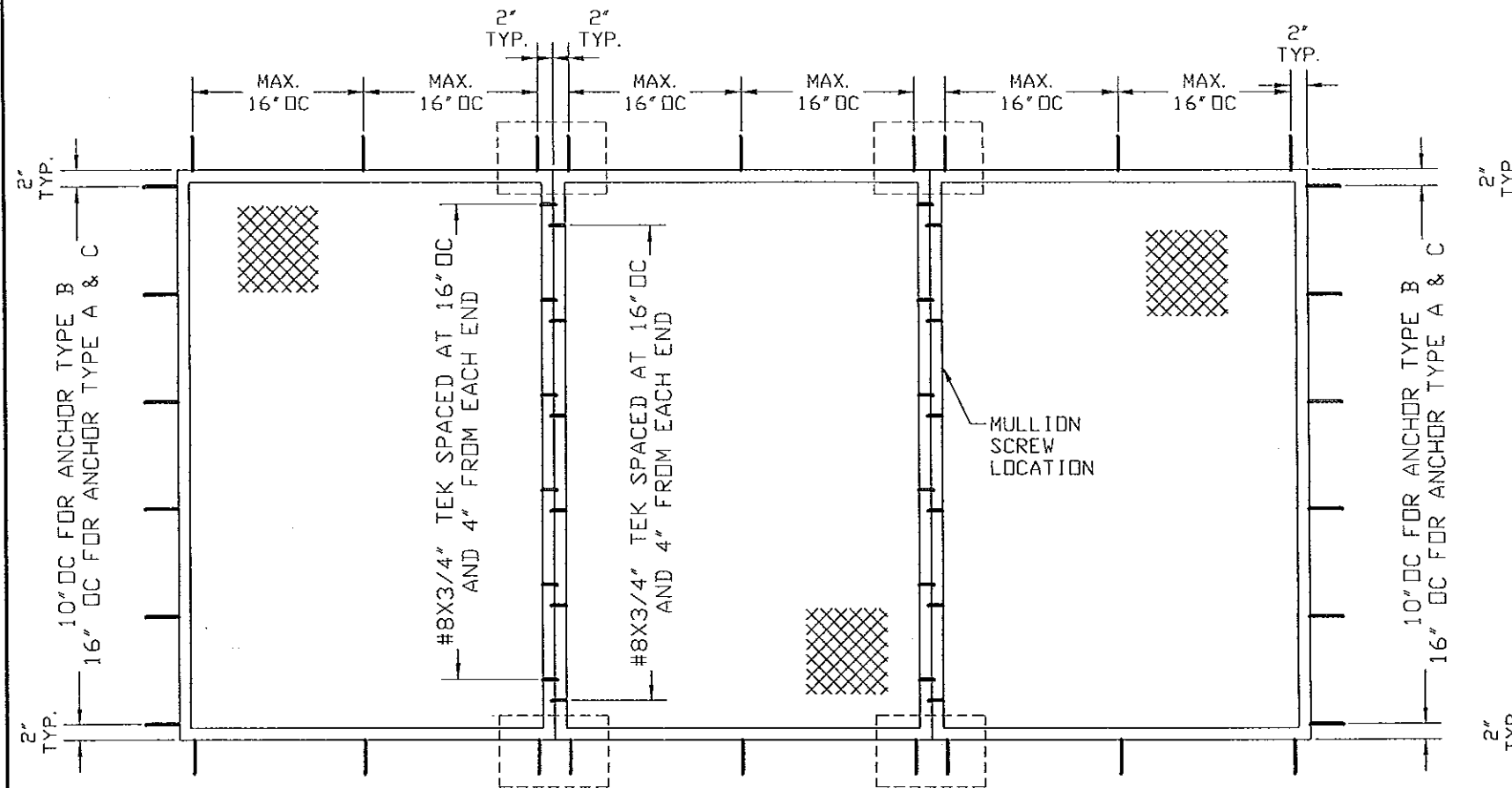
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0725.02
Expiration Date 08/22/2017
By *[Signature]*
Miami Dade Product Control

DATE: 05/17/2012
SCALE: NA
DESIGN BY: PPMF

SHEET
8 OF 10

DRAWING #:
12-097

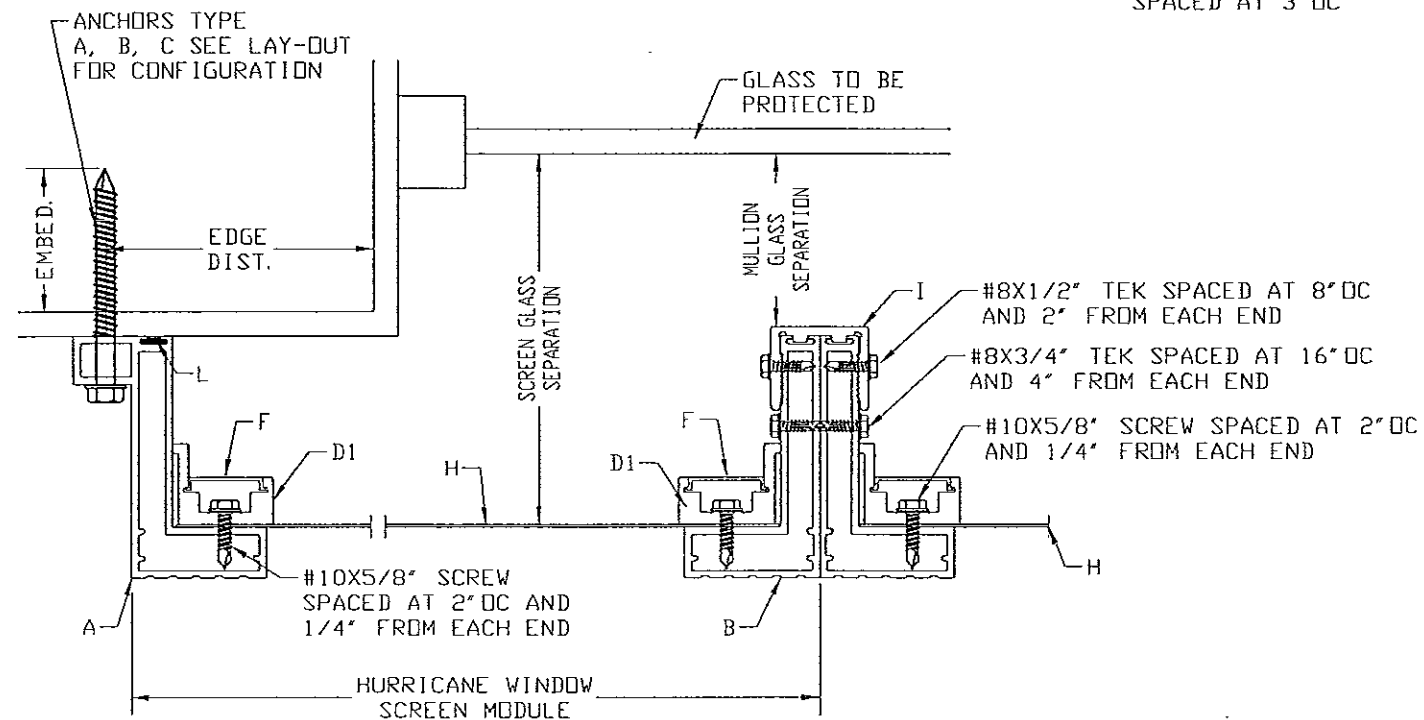
TYPE F BARRIER
Pd= +55, -60 PSF
FIXED MULTIPLE MODULES - APPLICABLE FOR "Z AND L" SERIES



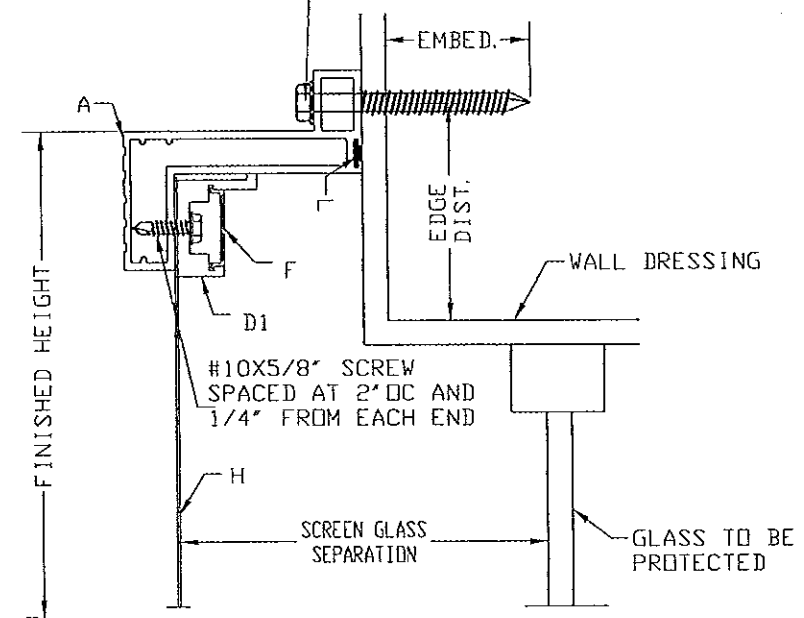
ANCHORS SPACING - "Z & L" TRACK ONLY
INSTALLATION INTO HOLLOW BLOCK, CONCRETE AND WOOD



TYPICAL AT EACH INTERMEDIATE MULLION
TYPE C ANCHOR - CLUSTER OF 2 ANCHORS
TYPE A ANCHORS - CLUSTER OF 4 ANCHORS
TYPE B ANCHORS - CLUSTER OF 8 ANCHORS
SPACED AT 3" OC



ANCHORS TYPE
A, B, C SEE LAY-OUT
FOR CONFIGURATION



GLASS SEPARATION: (MULTIPLE UNITS)

MULLION	ELEVATION <=30'	2 3/8"
	ELEVATION >30'	1 3/8"
SCREEN	ELEVATION <=30'	4 1/4"
	ELEVATION >30'	2 7/8"

ANCHORS SCHEDULE:

TYPE	DESCRIPTION	SUBSTRATUM	EMBED.	E.D.
A	1/4" TAPCONS BY ITW BUILDEX	3000 PSI CONCRETE	1.75	2.50
B	1/4" TAPCONS BY ITW BUILDEX	HOLLOW BLOCK	1.25	2.50
C	1/4" LAG SCREWS	WOOD SG>0.55	1.50	0.75

NOTES:
1 - EMBEDMENT AND EDGE DISTANCE ARE BEYOND WALL DRESSING

MANUFACTURER:

**PROTECH
SCREENS, INC**

2425 ROY ROAD
PEARLAND - TEXAS
PHONE: (281) 485-2300
FAX: (281) 485-8837

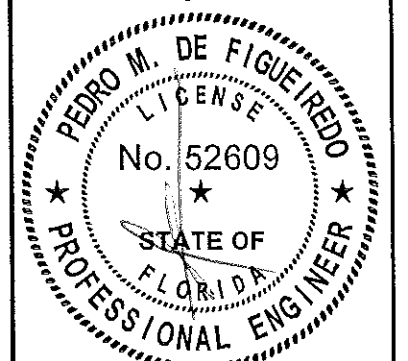
PRODUCT:

SCREEN BARRIER
0.028" STAINLESS STEEL
HURRICANE SCREEN
LARGE & SMALL MISSILE
IMPACT RATED

ENGINEERING:

ENGCO INC. CA 8116

5595 ORANGE DR. 201
DAVIE, FL. 33314
Tel.: (954) 585-0304
ENGCO@AOL.COM



MAR 12 2013
Engineer Seal
Pedro De Figueiredo - PE 52609

MIAMI-DADE BCCO:

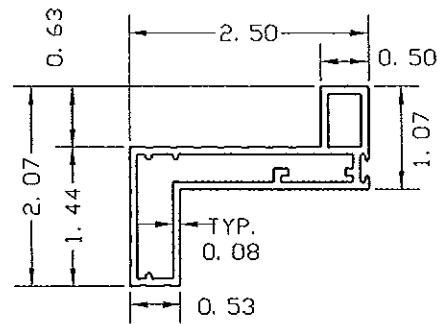
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 12-0725.02
Expiration Date 08/22/2017

By *[Signature]*
Miami Dade Product Control

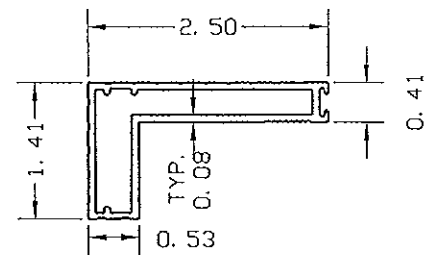
DATE: 05/17/2012
SCALE: NA
DESIGN BY: PPMF

SHEET
9 OF 10

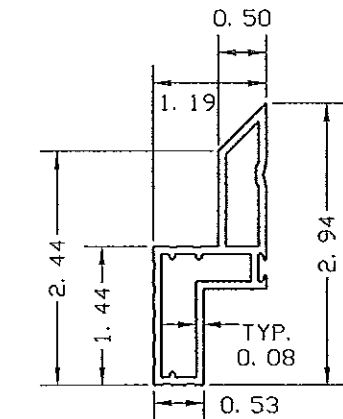
DRAWING #:
12-097



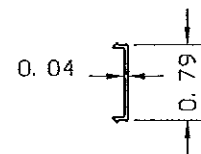
A- FLG H-NXT FRAME
#7348 - 6063-T5
US PAT. # PENDING
"Z" SERIES



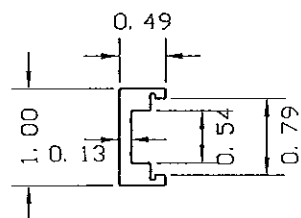
B- EXTENDED H-NXT FRAME
#7347 - 6063-T5
US PAT. # 6,314,690 B1
"L" SERIES



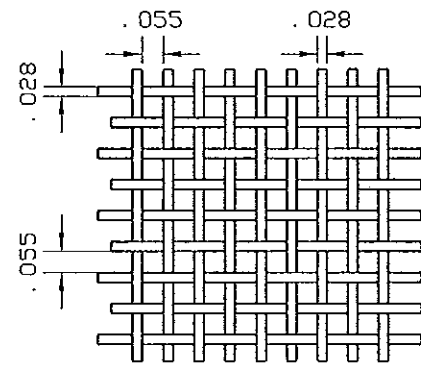
C- NXT-FLANGED FRAME
#6971 - 6063-T5
US PAT. # 6,230,455 B1
"F" SERIES



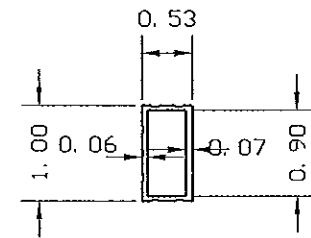
F- SCREW COVER
#1000244 BLK - PLASTIC



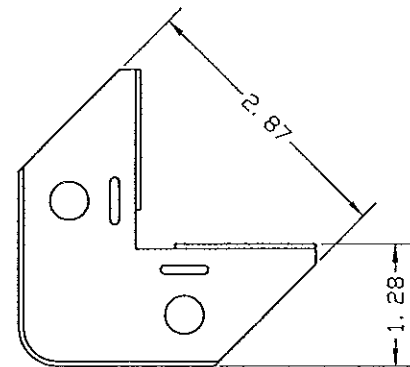
D- COVER STRIP V-CORNER
#7372 - 6063-T5
US PAT. # 4,932,457



H- NXT 12 MESH
.028 STAINLESS STEEL 304
SCREEN

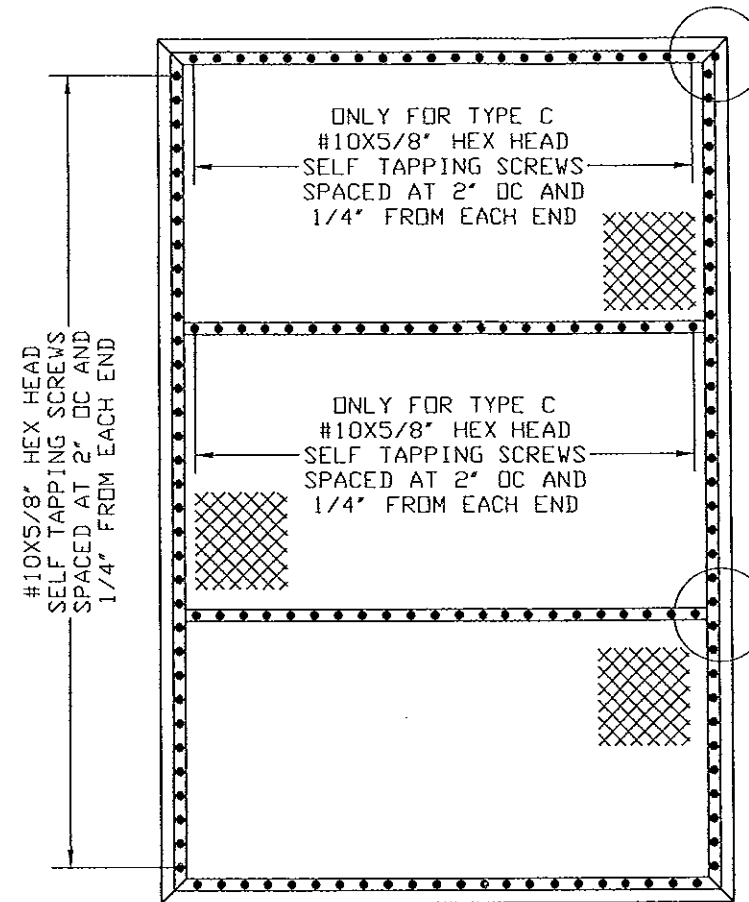


E- CENTER BAR
#4471 - 6063-T5

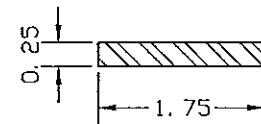
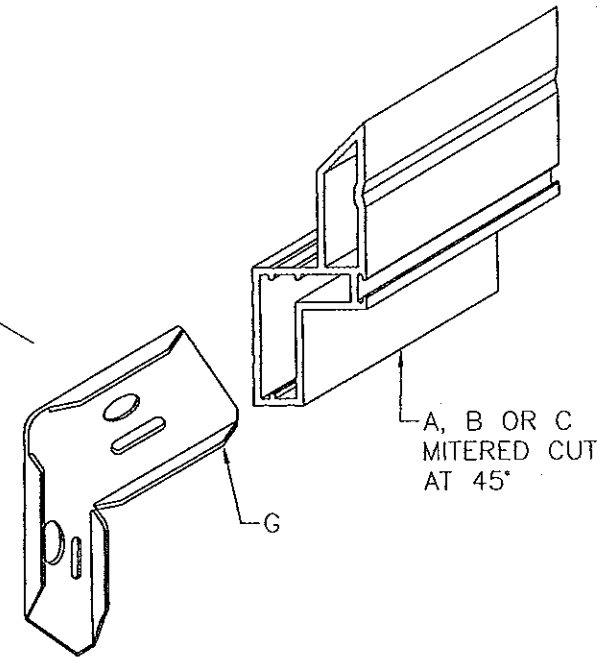


G- FRAME CORNER KEY
#390-0393
18ga/.05 GALV. STEEL

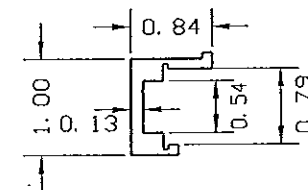
REAR ELEVATION SCREEN PANEL ASSEMBLY SCREWS LAY-OUT TYPE C, E AND F



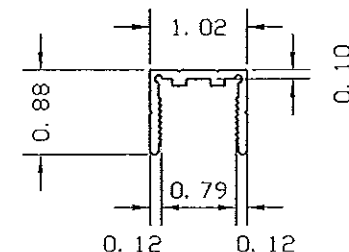
TYPICAL CORNER ASSEMBLY



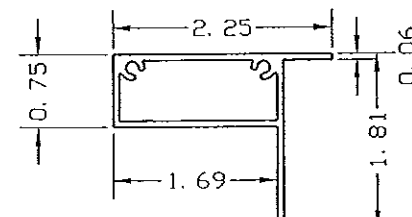
J- STEEL REINFORCEMENT
ASTM A36 STEEL
FULL SPAN OF MULLION



D1- COVER STRIP V-CORNER
#10405 - 6063-T5



I- FRAME CAP
6063-T5 ALUMINUM



O- OPERABLE SCREEN
SUBFRAMING - 6063-T5



MANUFACTURER:

**PROTECH
SCREENS, INC**

2425 ROY ROAD
PEARLAND - TEXAS
PHONE: (281) 485-2300
FAX: (281) 485-8837

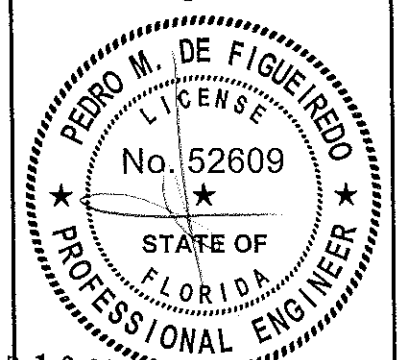
PRODUCT:

SCREEN BARRIER
0.028" STAINLESS STEEL
HURRICANE SCREEN
LARGE & SMALL MISSILE
IMPACT RATED

ENGINEERING:

ENGCO INC. CA 8116

5595 ORANGE DR. 201
DAVIE, FL. 33314
Tel.: (954) 585-0304
ENGCO@AOL.COM



MAP 12 2013
Engineer Seal
Pedro De Figueiredo - PE 52609

MIAMI-DADE BCCO:

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 12-0725.02
Expiration Date 08/22/2017
By *[Signature]*
Miami Dade Product Control

DATE: 05/17/2012
SCALE: NA
DESIGN BY: PPMF

SHEET
10 OF 10

DRAWING #:
12-097